

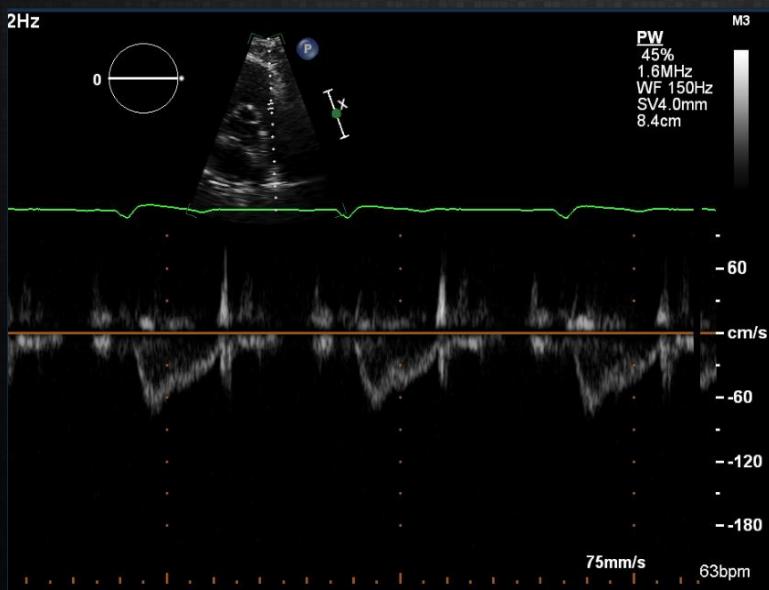
# Practice Board Exam Questions: Concepts of Imaging and Knobology

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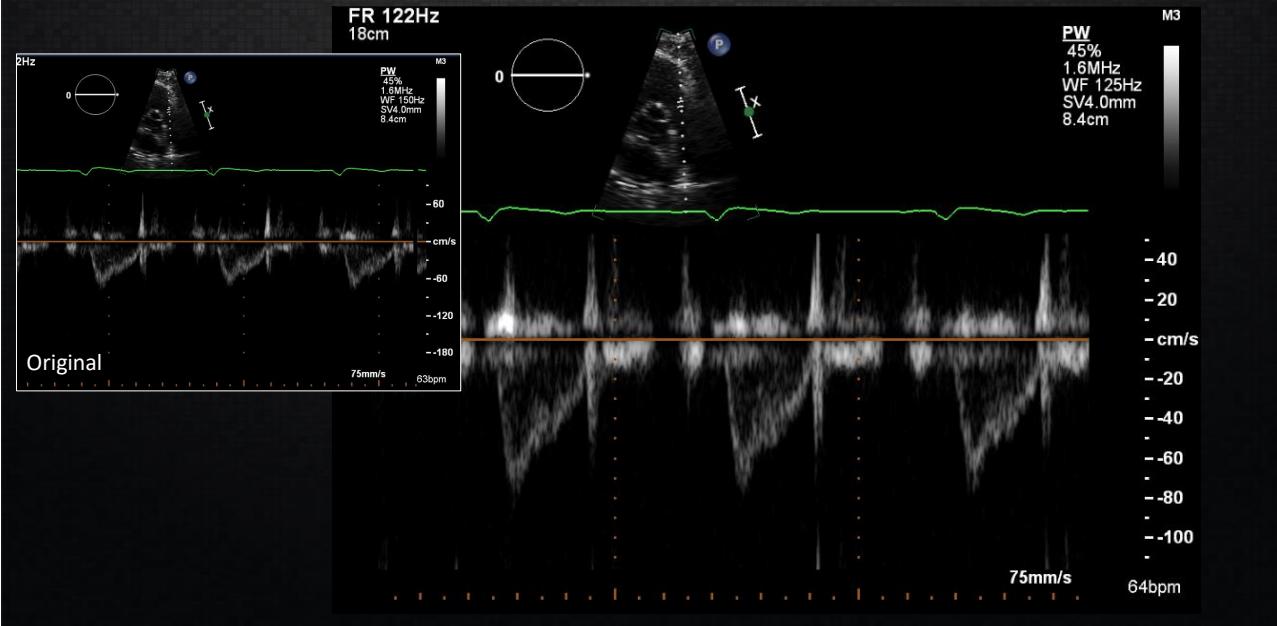
## Question 1

How do you optimize  
this acquisition?



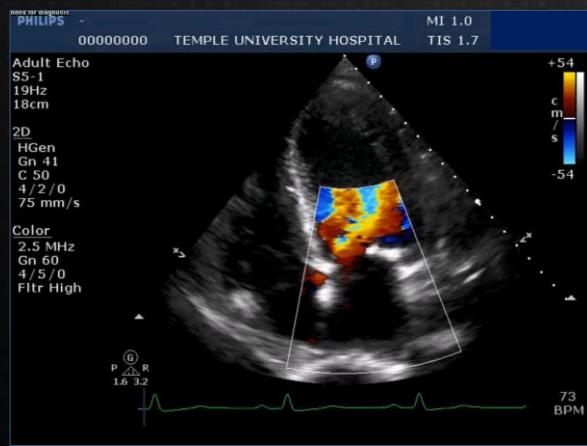
- A. Raise baseline
- B. Lower baseline
- C. Increase scale
- D. Decrease scale
- E. Pedoff transducer

**Answer: D. Decrease Scale**



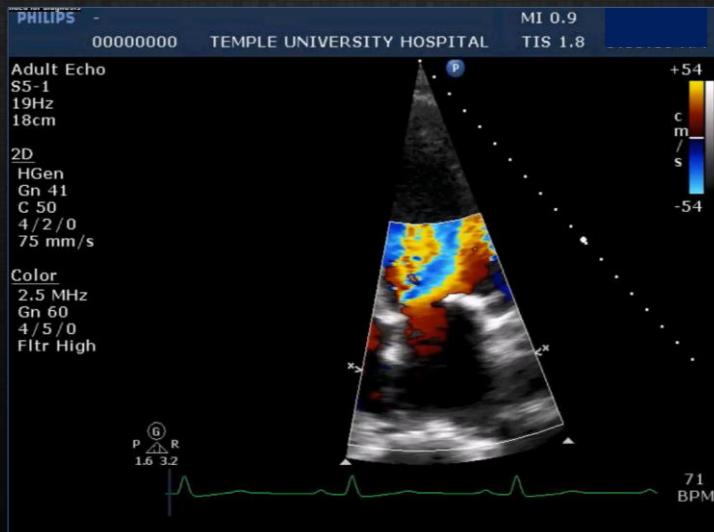
## Question 2

Which of the following would improve this image?



- A. Increase Doppler Gain
- B. Narrow 2D sector width
- C. Reduce 2D Gain
- D. Reduce Nyquist
- E. Enlarge color flow box

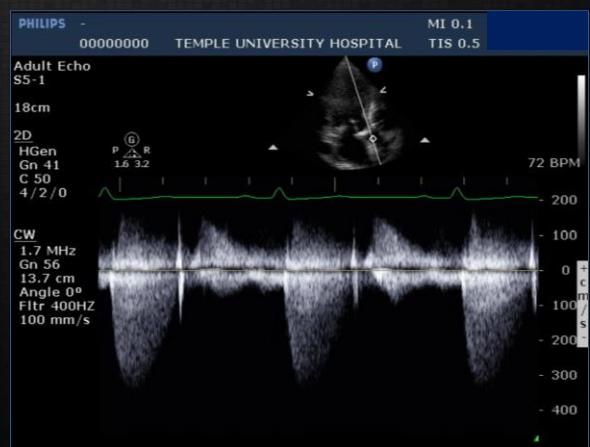
**Answer: B. Narrow 2D sector width**



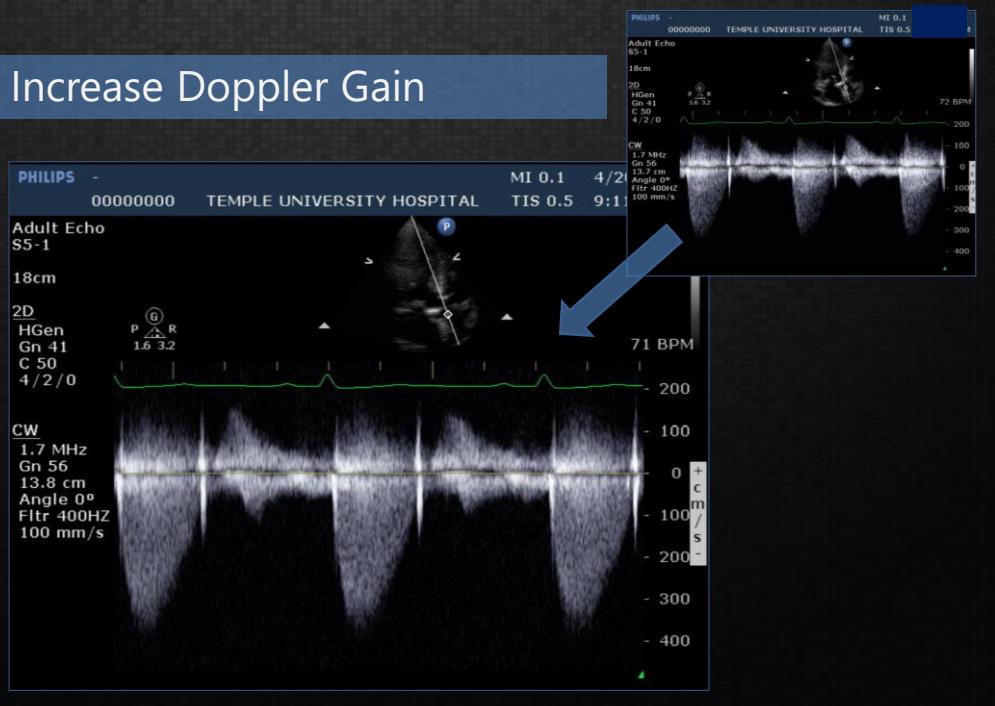
### Question 3

How would you improve the measurement of  $V_{max}$  across the aortic valve?

- A. Increase the scale
- B. Slow the sweep
- C. Increase the Doppler gain
- D. Pulsed-wave Doppler
- E. Move to parasternal long-axis



**Answer: C. Increase Doppler Gain**



## Question 4

Which of the following would lead to overestimation of mitral regurgitation by color flow Doppler?

- A. High 2D Gain
- B. Low Doppler Gain
- C. High Nyquist Limit
- D. High Doppler Gain
- E. Low 2D Gain

**Answer:** D. High Doppler Gain

Doppler angle, sample volume placement and Doppler gain are the most significant sources of error and variability